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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,780	04/30/2001	Brian T. Murren	GE1-007US	4333

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EXAMINER
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ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *15 February 2006*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-44* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-44* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *2/06*.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 7-05)   Office Action Summary   Part of Paper No./Mail Date 20060327

Response to Amendment

1.   This action is responsive RCE received on Feb. 15, 2006. Claims 33-44 were

newly added. Claims 1-44 are pending examination.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Claims 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claims 17-23 recite the limitation "a computer software architecture"; claim 24

recites "a method". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

3.   Claims 17-24 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

MPEP 2106 IV.B.2.(b)

A claim that requires one or more acts to be performed defines a process. However, not
all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460.
To be statutory, a claimed computer-related process must either: (A) result in a physical
transformation outside the computer for which a practical application in the technological arts is
either disclosed in the specification or would have been known to a skilled artisan, or (B) be
limited to a practical application within the technological arts.

Claims 17-24, in view of the above cited MPEP sections, are not statutory

because they merely recite a number of computing steps without producing any tangible

result and/or being limited to a practical application within the technological arts. The

use of a computer has not been indicated.

MPEP 2106.II.A

A process that consists solely of the manipulation of an abstract idea is not concrete or
tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994).

4.   Claims 17-23, in view of the above cited MPEP sections, are not statutory

because they merely recite a number of computing steps without producing any tangible

result and/or being limited to a practical application within the technological arts.

(c) Natural Phenomena Such as Electricity and Magnetism

5.   Claims 17 – 23 recite nothing but the physical characteristics of a form of energy,

such as a frequency, voltage, or the strength of a magnetic field, define energy or

magnetism, *per se,* and as such are nonstatutory natural phenomena. *O'Reilly v.*

Morse, 56 U.S. (15 How.) 62, 112 – 14 (1853). See MPEP 2106 IV.B.1. c.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

6.   Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Fields

et al., U.S. Patent No. 6,785,721 (referred to hereafter as Fields).

As to claim 1, Fields teaches a server system, comprising:

one or more computers;

an application executing on the computers to receive and process client requests

(see col. 4 lines 1-14); and

a constraint system to constrain operation of the application according to multiple

different constraints, the constraint system comprising a hierarchy of constraint layers,

with each constraint layer containing a set of one or more constraints that customize

operation of the application (see col. col. 4 lines 65-col. 5 lines 17, application is

customized according to a plurality of customization rules).

As to claim 2, Fields teaches a server system as recited in claim 1, wherein the

hierarchy comprises a constraint layer that contains legally mandated constraints to

constrain operation of the application according to legal principles (see col. 5 lines 58-

col. 6 lines 45, application customized according to security level of the user).

As to claim 3, Fields teaches a server system as recited in claim 1, wherein the

hierarchy comprises a constraint layer that contains company-mandated constraints to

constrain operation of the application according to preferences of a company that

operates the application (see col. 8 lines 55-col. 9 lines 49, application customized according to corporate options).

As to claim 4, Fields teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 8 lines 55-col. 9 lines 49, application customized according to user options).

As to claim 5, Fields teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 5 lines 58-col. 6 lines 45).

As to claim 6, Fields teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user (see col. 8 lines 55-col. 9 lines 49, application customized according to user preferences).

As to claim 7, Fields teaches a server system as recited in claim 1, where in the constraint layers are organized within the hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (see col. 8 lines 55-col. 9 lines 49).

As to claim 8, Fields teaches a server system as recited in claim 1, further comprising a constraint resolver to resolve the constraint layers so that operation of the

application is constrained by a sum of the constraints in the layers (see col. 8 lines 55-col. 9 lines 49).

AS to claim 9, Fields teaches a server system comprising:

one or more computers; and

a multi-layer application executing on the computers to handle client requests, the multi-layer application comprising:

a problem-solving logic layer to process the client requests according to an associated problem domain, the problem-solving logic layer containing one or more execution models to perform various sets of tasks when processing the client requests, the problem-solving logic layer producing replies to the client requests; a presentation layer to structure the replies produced by the problem-solving logic layer in a manner that makes them presentable on various client devices (see col. 8 lines 55-col. 9 lines 49, application customized according to plurality of rules and selected options); and

a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that specify how the replies should be structured to customize the replies for specific sets of conditions (see col. 8 lines 55-col. 9 lines 49).

As to claim 10, Fields teaches a server system as recited in claim 9, wherein constraint layers can be selectively added or removed from the constraint hierarchy

independently of other layers in the multi-layer application to produce different sets of

constraints (see col. 5 lines 55-col. 6 lines 45).

As to claim 11, Fields teaches a server system as recited in claim 9, wherein the

constraint hierarchy comprises a constraint layer that contains legally mandated

constraints that constrain the presentation layer to structure the replies to comply with

certain legal principles (see col. 5 lines 58-col. 6 lines 45, application customized

according to security level of the user).

As to claim 12, Fields teaches a server system as recited in claim 9, wherein the

constraint hierarchy comprises a constraint layer that contains company-mandated

constraints that constrain the presentation layer to structure the replies according to

preferences of a company that operates the application (see col. 8 lines 55-col. 9 lines

49, application customized according to corporate options).

As to claim 13, Fields teaches a server system as recited in claim 9, wherein the

constraint hierarchy comprises a constraint layer that contains customer-oriented

constraints that constrain the presentation layer to structure the replies according to

preferences of customers (see col. 8 lines 55-col. 9 lines 49, application customized

according to user preferences).

As to claim 14, Fields teaches a server system as recited in claim 9, wherein the

constraint hierarchy comprises a constraint layer that contains cultural constraints that

constrain the presentation layer to structure the replies according to cultural aspects

(see col. 5 lines 55-col. 6 lines 45).

As to claim 15, Fields teaches a server system as recited in claim 9, wherein the

constraint hierarchy comprises a constraint layer that contains end user constraints that

constrain the presentation layer to structure the replies according to preferences of end

users (see col. 8 lines 55-col. 9 lines 49, application customized according to user

preferences).

As to claim 16, Fields teaches a server system as recited in claim 9, wherein the

constraint layers can be removed or added to modify the set of constraints imposed on

structuring the replies (see col. 5 lines 45-col. 6 lines 55).

As to claim 17, Fields teaches a computer software architecture embodied on

one or more computer-readable media, comprising:

a constraint hierarchy of multiple constraint layers, each constraint layer

containing a set of one or more constraints that constrain operation of an application,

the constraint layers being organized within the constraint hierarchy such that a first

constraint layer limits a second constraint layer but the second constraint layer does not

limit the first constraint layer (see col. 8 lines 55-col. 9 lines 49, application customized

according to plurality of options); and

a constraint resolver to resolve the constraint layers so that operation of the

application is constrained by a set of the constraints in the constraint layers (see col. 5

lines 55-col. 6 lines 55).

As to claim 18, Fields teaches a computer software architecture as recited in claim 17, wherein constraint layers are selectively added to or removed from the constraint hierarchy to form different sets of constraints on the operation of the application (see col. 5 lines 55-col. 6 lines 55).

As to claim 19, Fields teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles (see col. 5 lines 55-col. 6 lines 55).

As to claim 20, Fields teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 8 lines 45-col. 9 lines 55).

As to claim 21, Fields teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 8 lines 45-col. 9 lines 55).

As to claim 22, Fields teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 5 lines 45-col. 6 lines 56).

As to claim 23, Fields teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user (see col. 8 lines 45-col. 9 lines 48).

As to claim 24, Fields teaches a method comprising: storing a hierarchy of constraints, each constraint being configured to constrain operation of a server application; and evaluating an operation of the server application in view of the hierarchy of constraints to modify operation according to the constraints in the hierarchy (see col. 8 lines 45-col. 9 lines 58).

As to claim 25, Fields teaches a method as recited in claim 24, further comprising adding or removing constraints from the hierarchy to alter operation of the server application (see col. 5 lines 45-col. 6 lines 55).

As to claim 26, Fields teaches a method as recited in claim 24, wherein the hierarchy of constraints comprises constraints selected from a group of constraints comprising: legally mandated constraints to constrain operation of the application according to legal principles; company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application; customer constraints to constrain operation of the application according to preferences of customers; cultural constraints to constrain operation of the application according to cultural aspects; and end user constraints to constrain operation of the application

according to preferences of an end user (see col. 8 lines 45-col. 9 lines 55 and col. 5 lines 45-col. 6 lines 58).

As to claims 27, Fields teaches a method for operating a server application, comprising:

receiving requests from multiple clients; processing the requests to produce replies; structuring the reply to define how the reply will appear when presented at the client; and constraining said structuring according to a set of one or more constraints to customize appearance of the reply,

the constraints comprising: legally mandated constraints to constrain appearance of the reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers;

cultural constraints to constrain appearance of the reply according to cultural aspects; and

end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 8 lines 45-col. 9 lines 55).

As to claim 28, Fields teaches a method as recited in claim 27, further comprising adding or removing constraints to change the set of constraints being applied to the structuring of the reply (see col. 5 –col. 6 lines 48).

As to claim 29, Fields teaches one or more computer-readable media comprising computer-executable instructions that, when executed, direct an application server to:

generate replies in response to client requests; and structure the replies according to a hierarchy of constraints to customize the replies, the constraints comprising a combination of one or more following constraints: legally mandated constraints to constrain appearance of a reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers; cultural constraints to constrain appearance of the reply according to cultural aspects; and end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 8 lines 45-col. 9 lines 55 and col. 5 –col. 6 lines 57).

As to claim 30, Fields teaches the server system as recited in claim 1, wherein the constraints are expressed as metadata (see col. 4 lines 10-45).

As to claim 31, Fields teaches the server system as recited in claim 1, wherein the constraints of constraint layer can have the effect of overriding the constraints of another lower constraint layer (see col. 8 lines 45-col. 9 lines 55).

As to claim 32, Fields teaches the server system as recited in claim 1 wherein the constraints define presentation aspects of a reply sent to a customer (see col. 8 lines 45-col. 9 lines 55).

As to claims 33-35, Fields teaches the system of claims 1, 9 and 17 wherein each constraint layer represents a different source entity that customizes the application (see col. 8 lines 45-col. 9 lines 55).

As to claims 36-38, Fields teaches the server of claims 24, 27 and 29 wherein the hierarchy includes multiple constraint layers and wherein each constraint layer represents a different source entity that customizes the application (see col. 8 lines 45-col. 9 lines 55).

As to claims 39-42, Fields teaches the system of claims 1, 9, 17 and 24 where the hierarchy of constraints comprises each of:

legally mandated constraints to constrain operation of the application according to legal principles (see col. 5 lines 58-col. 6 lines 45, application customized according to security level of the user).

company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 8 lines 55-col. 9 lines 49, application customized according to corporate options).

customer constraints to constrain operation of the application according to preferences of customers (see col. 8 lines 55-col. 9 lines 49, application customized according to user options).

cultural constraints to constrain operation of the application according to cultural aspects (see col. 5 lines 58-col. 6 lines 45).

end user constraints to constrain operation of the application according to preferences of an end user (see col. 8 lines 55-col. 9 lines 49, application customized according to user preferences).

As to claims 43 and 44, Fields teaches the method and system of claims 27 and 29 wherein the constraints comprise each of the legally mandated constraints, the company mandated constraints, the customer constraints, the cultural constraints and the end user constraints (see col. 8 lines 55-col. 9 lines 49 and col. 5 lines 45-col. 6 lines 56).

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.
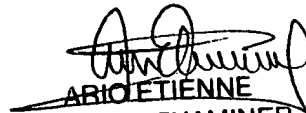
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

March 27, 2006

ARIO ETIENNE
PRIMARY EXAMINER